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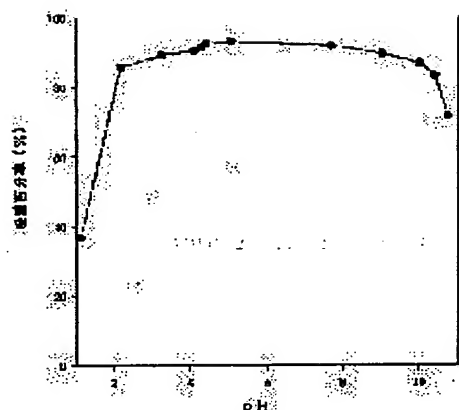
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(54) ADSORBENT MADE FROM PLANT BIOMASS

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a technology for removing hazardous substances which can satisfy tight environmental regulations with an inexpensive adsorbent and simple operation.

SOLUTION: In this adsorbent, metal ions are carried on plant biomass mainly comprising cellulose and/or hemicellulose on which functional groups of an acidic phosphate ester are immobilized by reacting them with phosphoric acid. A preferable example as the plant biomass is a residue of squeezed orange. The adsorbent where a ferric ion is used as the carried metal ion is used for removing trivalent and pentavalent arsenic, pentavalent phosphorus, trivalent antimony, or tetravalent selenium. The adsorbent where a tetravalent cerium ion is used as the carried metal ion is used for removing a fluoride ion.



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